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July 26, 1993

Mr. William F. Caton  
Acting Secretary  
Federal Communications Commission  
1919 M Street, N.W.  
Washington, D.C. 20554

Re: MM Docket No. 93-136

RM-8161

BEFORE THE

**Federal Communications Commission**

WASHINGTON, D.C. 20554

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JUL 26 1993FEDERAL COMMUNICATIONS COMMISSION  
OFFICE OF THE SECRETARY

In the Matter of )

Amendment of Section 73.202(b)  
Table of Allotments  
FM Broadcast Stations  
(Key Colony Beach, Key Largo  
and Marathon, Florida)

MM Docket No. 93-388  
RM-8161

TO: Chief, Allocations Branch  
Mass Media Bureau

**COMMENTS OF SPANISH BROADCASTING SYSTEM OF FLORIDA, INC.**

Spanish Broadcasting System of Florida, Inc. ("SBS"), licensee of Station WZMQ(FM), Key Largo, Florida, by its counsel, hereby respectfully submits its Comments in response to the Notice of Proposed Rulemaking released on June 3, 1993 ("NPRM") in the above-referenced proceeding.

First, SBS reiterates its support for the changes proposed in its Petition and set forth in the NPRM, and hereby incorporates by reference its previous filings in this docket. Upon issuance of an order changing its channel allotment at Key Largo as proposed in the NPRM, SBS will promptly file a Form 301 application for CP and, if granted, will promptly change its frequency as authorized (alternatively, if filing Form 302 is all the Commission deems necessary, SBS will promptly file such form reflecting the frequency change.)

Second, in response to the Commission's request at paragraph 3 of the NPRM for evidence of the interference referred to in the Petition, there are attached hereto the statements of Charles Dreher, technical consultant to SBS' Station WZMQ and E.W. Bie,

technical director of Station WCTH(FM) Plantation Key, Florida. These statements, written by the top technical personnel at each station, confirm the existence of receiver-induced third-order intermodulation interference ("RITOIE") to WCTH caused by the co-location and proximity of WKLG and WZMQ and that the interference ceases when either or both stations leave the air. Further, Mr. Bie states that WCTH has received numerous complaints from listeners about this RITOIE interference.

Additionally, the power utility which furnishes electrical service to the Florida Keys and which utilizes the FM subcarrier of WCTH for power load management purposes previously submitted comments in this proceeding confirming that such RITOIE prevents it from accessing its power load-shedding devices in the Key Largo area.

In total, the existence, extent and nature of the interference is well-known and has been proven beyond any doubt.

Finally, in addition to the reasons previously advanced for the channel change, SBS believes that a change of channel for WZMQ will have the added benefit of providing improved reception of WZMQ. WZMQ's present frequency is, at some times on some receivers and at some locations at the periphery of its protected service area, subject to interference from other nearby co-channel or adjacent channel stations. Such interference is not infrequent and sometimes seems to be caused by weather-related phenomena. Based on monitoring, it is expected that a WZMQ frequency change to the channel proposed in the NPRM will

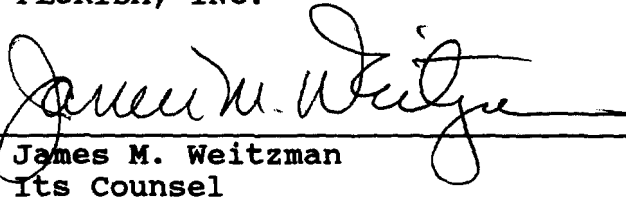
alleviate this problem due to the greater distances to co-channel and adjacent channel stations from such proposed channel.

In conclusion, for all the reasons advanced herein and earlier in this Docket, SBS respectfully requests the issuance of an order adopting the channel changes proposed in the NPRM and modifying WZMQ's license accordingly.

Respectfully submitted,

SPANISH BROADCASTING SYSTEM  
OF FLORIDA, INC.

By: \_\_\_\_\_

  
James M. Weitzman  
Its Counsel

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July 26, 1993

**STATEMENT OF**  
**CHARLES R. DREHER**

The undersigned, Charles R. Dreher, hereby states the following:

I am the broadcast technical consultant and furnish contract engineering services for a variety of broadcast stations in Florida. I have been a broadcast engineer for 37 years.

As the technical consultant to Station WZMQ(FM), Key Largo, Florida, I have been asked to furnish information concerning the existence and extent of intermodulation interference to the reception of Station WCTH(FM), Plantation Key, Florida by the current arrangement of FM broadcast frequencies in the Key Largo, Florida area.

Stations WZMQ(FM), Key Largo (103.9 MHz) and WKLG(FM), Rock Harbor (102.1 MHz) share a common transmitting antenna mounted on an approximately 250 foot tower in Key Largo, Florida.

Reports of third-order receiver-induced intermodulation interference ("RITOIE") to reception within the Key Largo area of Station WCTH(FM), Plantation Key, prompted me to investigate the cause of same.

In April, I conducted informal reception tests in the Key Largo area using a variety of FM receivers and confirmed the existence of the intermodulation. The intermod occurs as a result of nonlinear mixing of signals in the FM receivers when within a mile or less from the radio stations transmitting antenna. This causes interference to the reception of WCTH(FM) on 100.3 MHz. Efforts to resolve such problem by repositioning

the receiver or adjusting antennas do not solve the problem. Mobile FM receivers, because of their transient nature in the area, are impossible to remedy.

A more recent test was conducted by an engineer sent down from Carl T. Jones Corporation, Springfield, Virginia. Mr. Michael Nicolav, an engineer in the Carl T. Jones testing

The significance of the interference at present cannot be understated. The Florida Keys electric power co-op, which provides electricity to all of the Florida Keys, uses WCTH's subcarrier for power load management purposes to control loads during times of peak demand to prevent brown-outs or black-outs. Due to the RITOIE, they cannot control receiver-equipped loads in the Key Largo area which is affected.

Furthermore, the new emergency broadcasting system for Monroe County set up by the Florida Association of Broadcasters originally envisioned WCTH as being the Primary Station. However, due to the RITOIE in Key Largo which prevents proper reception of WCTH's signal, another station, WFKZ(FM), a Class A station, was designated in its place.

A frequency change for WZMQ will remedy all of these problems.

7-12-93

*Charles R. Decker*

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## STATEMENT OF E.W. BIE

THE UNDERSIGNED, E.W. BIE, HEREBY STATES THE FOLLOWING:

1. I AM THE TECHNICAL DIRECTOR FOR RADIO STATION WCTH(FM), PLANTATION KEY, FLORIDA. AS SUCH, I AM RESPONSIBLE FOR THE OVERALL TECHNICAL OPERATION OF THE STATION.
2. IN CONNECTION WITH THE COMMISSION'S RULEMAKING PROCEEDING LOOKING TOWARD CHANGING THE ARRANGEMENT OF CHANNELS BETWEEN STATIONS WZMQ (FM), KEY LARGO, AND WKLG (FM), ROCK HARBOR, BOTH FLORIDA, I WANT TO MAKE CLEAR FOR THE RECORD THAT STATION WCTH (FM) IS EXPERIENCING THIRD-ORDER RECEIVER-INDUCED INTERMODULATION INTERFERENCE TO RECEPTION OF ITS SIGNAL WITHIN THE KEY LARGO AREA OF THE FLORIDA KEYS. WE HAVE RECEIVED NUMEROUS COMPLAINTS FROM LISTENERS, USING BOTH AUTOMOBILE, PORTABLE AND NON PORTABLE RADIOS, THAT THEY ARE UNABLE TO RECEIVE OUR SIGNAL IN THE KEY LARGO AREA. OUR PREDICTED SIGNAL STRENGTH IN THIS AREA IS WELL ABOVE THE LEVEL AT WHICH THESE RECEIVERS SHOULD BE ABLE TO PICK UP OUR SIGNAL WITHOUT INTERFERENCE.
3. I HAVE CHECKED OUT THIS SITUATION MYSELF AND HAVE CONFIRMED THE EXISTENCE OF THIS INTERFERENCE. BASED ON ALL INDICATIONS AND TEST WHICH I HAVE CONDUCTED, IT IS SIMPLY RECEIVER-INDUCED INTERMODULATION INTERFERENCE. THE INTERFERENCE DISAPPEARS WHEN EITHER WKLG (FM) OR WZMQ (FM) IS OFF THE AIR.
4. IT IS MY OPINION THAT A FREQUENCY CHANGE FOR WZMQ (FM) AS PROPOSED IN THE RULEMAKING WILL REMEDY THESE PROBLEMS



CERTIFICATE OF SERVICE

I, Vallarie Harper-Bell, a secretary to the law firm of  
Kaye, Scholer, Fierman, Hays & Handler, hereby certify that I  
have this ~~Twenty-sixth~~ day of July, 1992, sent copies of the